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John K. McCormick

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JOHN K. MCCORMICK
6781 GLACIER DRIVE
WEST BEND, WI 53090

EXAMINER

CHONG CRUZ, NADJA N

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/710,385	Applicant(s) MCCORMICK, JOHN K.	
	Examiner NADJA CHONG CRUZ	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-2, 5-6 and 9-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This is a Final office action in reply to the response filed on 1 October 2009.
2. Claims 1-2, 5-6 and 9-10 have been amended.
3. Claims 3-4, 7-8 and 11-16 have been cancelled.
4. Claims 1-2, 5-6 and 9-10 are currently pending and have been examined.

Claim Objections

5. Claim 5 is objected to because of the following informalities: step "iv" is repeated twice. Appropriate correction is required.
6. Claim 9 is objected to because of the following informalities: f. the program code to calculations the product [...] it seems a typographical error of "to calculations" instead of "to calculate". Appropriate correction is required.

Response to Amendments

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.
8. The drawings were previously objected. The Examiner thanks the applicant for correcting this minor flaw.
9. The specification was previously objected. The Examiner thanks the applicant for correcting this minor flaw.
10. The provisional obviousness-type double patenting rejection of claims 1 and 13 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 13 and 18 of copending application No. 10/710,384 is withdrawn because a terminal disclaimer was filed.

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11. The provisional obviousness-type double patenting rejection of claim 1 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending application No. 10/710,396 is withdrawn because a terminal disclaimer was filed.
12. The rejection of claim 10 under 35 U.S.C. § 112 First Paragraph is withdrawn in light of Applicant's amendment.
13. The rejection of claims 1, 2, 5, 6, 9 and 10 under 35 U.S.C. § 112 Second Paragraph relating to indefinite language (e. g., the possible measures, etc) for clarity purposes is withdrawn in light of Applicant's amendment. However amended claims 1, 5 and 9 still recites limitations (e.g., the primary strategic objective, etc.,) that are insufficient antecedent basis for these limitations in the claims. Please see MPEP 2173.05(e) [R-5] Lack of Antecedent Basis. "A claim is indefinite when it contains words or phrases whose meaning is unclear. The lack of clarity could arise where a claim refers to "said lever" or "the lever," where the claim contains no earlier recitation or limitation of a lever and where it would be unclear as to what element the limitation was making reference." For example, it is unclear in step f, which jobs/and or work are consistent with said primary strategic objective measure, the independents or dependants jobs and/or work?
14. The rejection of claims 1-2 under 35 U.S.C. § 101 Applicant argues that the claims as amended, especially claims 1 and 2 meet the requirements of 35 U.S.C. 101 because they recite processes that transform the underlying subject matter. Applicant's Remarks, 10/1/2009, pg. 55-57. In response, Examiner respectfully disagrees. Regarding the transformation requirement under 35 U.S.C. 101, Examiner notes that the Federal Circuit has held unpatentable a process of graphically displaying variances of data from average values that neither specified any particular type or nature of data nor how or from where the data was obtained or what the data represented. In re Abele, 684 F.2d 902, 909; see also In re Meyer, 688 F.2d 789, 792-93 (CCPA 1982) (process claim involving undefined "complex system" and indeterminate "factors" drawn from unspecified "testing" not patent-eligible). In contrast, the court has held one of Abele's dependent claims to be drawn to patent-eligible subject matter where it specified that "said data is X-ray attenuation data produced in a two dimensional field by a computed tomography scanner";

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wherein this data clearly represented physical and tangible objects, namely the structure of bones, organs, and other body tissues. Abele, 684 F.2d at 908-09. Thus, the transformation of that raw data into a particular visual depiction of a physical object on a display was sufficient to render that more narrowly-claimed process patent-eligible.

15. In our case, converting the list of work into strategic measures for each listed job that correlates an entity's strategic objective as claimed by Applicant is more akin to the unpatentable claim in Abele in that it displays a change (e.g., listing work or jobs into an ordered or sequenced, structure) or variance in data than the patentable claim in Abele, in which the raw data was used to create a visual representation of a physical object. Therefore, claims 1 and 2 are considered non transformational and do not meet this prong of the machine-transformation test under 35 U.S.C. 101.

Claim Rejections - 35 USC § 112

16. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

17. Claims 1-2, 5-6 and 9-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As per claims 1 recites *listing a plurality of constraints within said selected constraint category and prioritizing the order of said constraints within said selected constraint category*. As per claims 5 and 9 recites *calculate the product of said first measure and constraints; prioritized said calculated products [...]; calculate the work schedule measure as the product of said second measure [...]* These limitations are not supported by the original disclosure.

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18. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

19. Claims 1-2, 5-6 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
20. As per claim 1, recites *the primary strategic objective, the primary strategic objective measure, said jobs/and/or work, the order, the said work schedule measure and the work queue* As per claim 5 recites *the independent and dependant work, the product, the planning period, the work schedule measure, the work queue, and the order*. As per claim 9 recites *the sequence, the work queue, the entity's primary strategic objective, , the independent and dependant activities or work, the program code, the product, the planning period, the work schedule measure and the work schedule*. There is insufficient antecedent basis for these limitations in the claim.
21. As per claim 5 recites a memory [...] containing said entity's Management Information System (MIS). How does a memory contain a system? Appropriate correction is required.

Claim Rejections - 35 USC § 101

22. 35 U.S.C. 101 reads as follows:
- Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
23. Claims 1-2 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent and recent Federal Circuit decisions, *88 USPQ2d 1385 In re Bilski U.S. Court of Appeals Federal Circuit*. A method claim must meet a specialized, limited meaning to qualify as a patent-eligible process claim. As clarified in *Bilski*, The test for a method claim is whether the claimed method is (1) tied to a particular machine or apparatus, or (2) transforms a particular article to a different state or thing. This is called the "machine or-transformation test" (see at least *Diamond v. Diehr*, 450 U.S. 175, 184

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(1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

24. There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent eligible. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable process. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step, such a data gathering or outputting, is not sufficient to pass the test.
25. Nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. See *Benson*, 409 U.S. at 71-72. As *Comiskey* recognized, "the mere use of the machine to collect data necessary for application of the mental process may not make the claim patentable subject matter." *Comiskey*, 499 F.3d at 1380 (citing *In re Grams*, 888 F.2d 835, 839-40 (Fed. Cir.1989)).
26. Incidental physical limitations, such as data gathering, field of use limitations, and post-solution activity are not enough to convert an abstract idea into a statutory process. In other words, nominal or token recitations of structure in a method claim do not convert an otherwise ineligible claim into an eligible one. Claim 2 inherit the same deficiencies as claim 1 and are therefore rejected for the same reasons as claim 1.
27. It is also noted that the mere recitation of a machine in the preamble in a manner such that the machine fails to patentably limit the scope of the claim does not make the claim statutory under 35 U.S.C. § 101, as seen in the Board of Patent Appeals Informative Opinion *Ex parte Langemyr et al.* (Appeal 2008-1495).

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28. Claims 9-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As recited, claim 9 is directed toward a computer readable media encoded with a computer program; software per se. However, under the current guidelines of 35 USC 101, computer software must be tangibly embodied on a computer readable medium, and, when executed by a computer processor, perform the steps of the software. In their broadest reasonable interpretation and in light of the specification, claim 9, as recited, can be interpreted to be embodied on abstract mediums such as carrier waves and signals, and therefore not eligible for patent protection. Accordingly, claim 9 is not eligible for patent protection.

Response to Arguments

29. Applicant's arguments received on 1 October 2009 have been fully considered but are not persuasive.
30. With regard to claims 1, 5 and 9, Applicant argues that the prior art of record, specifically that (1) *It is not clear that Brown has "elected a strategic objective by which to schedule tasks or activities as stated by the examiner at the bottom of the page 15 of the Office Action (page 57, 2nd ¶);* (2) *Nor does Brown "j. select the constraint by which said work will be scheduled" or "k. prioritize the order of the constraints to schedule said work by";* (3) *Brown does not teach selecting a constraint and prioritizing said constraint, but rather averaging all constraints (page 57, last ¶);* (4) *Brown is not scheduling by largest impact on a single constraint, but by shortest duration while optimizing multiple resources simultaneously (page 58, 2nd ¶);* with regard to Ouimet (5) *the list of measures for the work schedule measure are different than the measure for the strategic objective and not part of the Aggregate Measures Table of Ouimet (page 58, last ¶);*
31. With regard to claim 2, Applicant argues that the prior art of record, specifically that (6) *Brown does not add the impact of a work schedule measure to any other work schedule measure [...];* (7) *Brown is not scheduling jobs one at a time, removing the job from the job queue and adding the impact of the scheduled job to the remaining jobs (page 60, last ¶)* and (8) *If the combination of Circirello's teaching "to remove this selected task" was applied to Brown, Brown's invention would fail to operate as claimed [...]there would be no jobs to schedule in a second iteration thus*

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rendering Brown's invention unusable" (page 61, 1st ¶) and *Ouimet's invention would fail to realize its intent* (page 61, 2nd ¶).

- 32.** In response to applicant's arguments (1) against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The reference of Brown teaches scheduling task or activities and the reference of Ouimet teaches the selection of a strategic objective and measures. Therefore, it would have been obvious to one of ordinary skill in the art to modify Brown to include the teaching of Ouimet (e.g., strategic objectives (maximize/minimize) and measures) because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable as evidenced by Draman, which teaches that "[w]idget recently adopted product profit" (e.g., primary strategic objective measure) "as the criterion" (e.g., primary measure) "for establishing its weekly production schedule" (e.g., scheduling jobs and/or work) (Draman, page 192, second column, last paragraph). The reference of Draman teaches that it would have been obvious to one ordinary skill in the art to apply Ouimet's teaches (e.g., select a strategic objectives and measures) to modify Brown scheduling to schedule based on a criterion as explained above.
- 33.** In response to applicant's arguments (2) and (3). Examiner respectfully disagrees since the algorithm schedules single or multiple projects with a single or multiple resource constraints then those resource constraints must be selected in order to be fed into the algorithm.
- 34.** In response to applicant's argument (4) that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., scheduling by largest impact on a single constrain) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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35. In response to applicant's argument (5) that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
36. In response to applicant's argument (6) that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., add the impact of a work schedule measure to any other work schedule measure) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
37. In response to applicant's argument (7) that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., scheduling jobs one at a time and adding the impact of the scheduled job to the remaining jobs) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further *Cicirello* teaches *removing said scheduled job and/or work from said work queue* in page 6, Algorithm 1, which teaches "remove this selected task" (e.g., scheduled job and/or order) "from the set of unscheduled tasks" (e.g., work queue));

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove a scheduled job and/or order from the work queue to improve the combination of Brown, Ouimet, Draman and Boonkhun, thereby giving the predictable result of providing a best solution (*Cicirello*, pages 5-6, last paragraph).

38. In response to applicant's argument (8) that Brown's invention in combination with *Cicirello* will render Brown's invention unusable and that Ouimet's invention would fail to realize its intent, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must

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be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Claim Rejections - 35 USC § 103

39. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

40. Claims 1, 3-5, 7-9, 11-13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al., (US 5,671,361) hereinafter "Brown" in view Ouimet (US 2002/0107819 A1) further in both view of Draman et al., Constraint-based accounting and its impact on organizational performance: A simulation of four common business strategies, Integrated Manufacturing System, 2002, hereinafter "Draman" and Boonkhun, Analysis of Operations Research Models Using Activity-Based Costing, The Pennsylvania State University, December 2002.

Claim 1:

Brown as shown discloses a method for scheduling activities and/or work consistent with an entity's strategic objective, the method comprising:

- *h. listing a plurality of constraints categories for scheduling said jobs and/or work* (column 6, lines 33-61, which teaches Table 1, which disclose "[t]he resource requirements" (e.g., a plurality of constraints) "for each activity", where "[r]esource Type# is what type of resource" (e.g., constraint category) "is necessary to do the work (i.e., for example: Resource Type 1 can be Trucks, Resource Type 2 can be workers, Resource Type 3 can be money)");

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- *i. selecting a constraint category from said list of a plurality of constraint categories by which said jobs and/or work will be scheduled (column 7, lines 16-24, which teaches "[t]he resource availability (Total Number of particular Resource Type available) for this project" where the table illustrates the constraint selected: 5 for resource type 1, 5 for resource type 2 and 3 for resource type 3. In addition, column 2, lines 22-24, which teaches that "schedules single or multiple projects with single or multiple resource constraints");*
- *j. listing a plurality of constraints within said selected constraint category and prioritizing the order of said constraints within said selected constraint category to schedule said jobs and/or work by (column 2, lines 24-26, which Brown teaches that it "incorporates the time and the resource characteristics of project activities into a priority rule based search heuristic to determine an activity's priority for scheduling" and column 3, lines 24-25 which teaches "[r]ank the activities/tasks in order of the priority rule value");*
- *k. for said scheduling of said jobs and/or work, calculate said work schedule measure for each said job and/or order in the work queue for the first said prioritized constraint within said selected constraint category (column 3, lines 22-25, which teaches "[d]etermine the priority rule values" (e.g., work schedule measure) "for each activity and task" and "[r]ank the activities/tasks in order of the priority rule value");*
- *l. prioritized said calculated work schedule measures in (k) above by largest work schedule measure first for said first prioritized constraint; m. scheduling all of said independent jobs and/or work by said prioritized calculated work schedule measures, then scheduling all of said dependant jobs and/or work by said prioritized calculated work schedule measures (column 3, lines 24-25 which teaches "[r]ank the activities/tasks" (e.g., independent and dependant jobs) "in order*

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of the priority rule value" (e.g., work schedule measures), Figure 3, which it illustrates the relationship between the activities/task (e.g., independent and dependant jobs) and column 4, lines 1-4, which teaches that "[e]ach job or activity would have a LFT value computed. The PRST algorithm utilizes this LFT value to help establish priorities" (e.g., the largest work schedule measures) "among activities for scheduling purposes" and column 3, lines 26-28, which teaches "[s]chedule the activities/task in priority order while maintaining the precedence relationships for the project network and satisfying resource constraints");

- *n. repeating steps k through m for each of said prioritized constraints until all of the said prioritized constraints and all of said jobs and/or work have been scheduled* (Abstract, which teaches "[t]he priority values are ranked to determine an optimum schedule of **all** job tasks and activities" (independent and dependant jobs) "to complete the entire project");

Brown provides "an algorithm that minimizes time duration project schedule" (e.g., strategic objective: minimize project time) "for a sequence of job tasks". Further, Brown provides "a project scheduling algorithm that looks ahead in time to anticipate and avoid infeasible schedules" (e.g., strategic objective: minimize cost by decreasing downtime and backorder). (Brown, column 2, lines 6-11). Brown fails to explicitly teach the following limitations. However, Ouimet, in an analogous art of scheduling/planning for the purpose of satisfying at least one strategic objective (§ 0010) as shown does:

- *c. selecting the primary strategic objective from said prioritized strategic objectives* (Figure 6, "Select Primary Goal", § 0026, which teaches "select and define a primary objective or goal");

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- *d. listing a plurality of measures for said primary strategic objective* (§ 0054-0068, which teaches a list of possible measures for said primary strategic objective (e.g., profit));
- *e. selecting one of said measures from said list of a plurality of measures to be the primary strategic objective measure* (§ 0069, which teaches that “the task of selecting the primary objective from the Aggregate Measure Table” (e.g., list of a plurality of measures) “may also includes the further task of selecting whether the objective is to maximized or minimized. Strategic Objectives are also included in the Aggregate Measure Table and are selected by the user”);
- *f. listing a plurality of measures to be used for scheduling said jobs and/or work consistent with said primary strategic objective measure* (§ 0026, which teaches that “the user must first select and define a primary objective or goal. The most common primary objective is profit” (e.g., primary strategic objective measure) where possible measures are defined from the list of a plurality of measures (§ 0054-0068) “[t]he User Defined Measures include a weighted mix of any of the previously defined aggregate measures”);
- *g. selecting a primary measure for said scheduling of said jobs and/or work consistent with said primary strategic objective measure from said listing of said plurality of measures to be used for scheduling said jobs and/or work; using said primary measure* (§ 0026 and 0054, which teaches that “the system lists the various Aggregate Measures table from which the user can make a selection for any particular simulation” (e.g., aggregate measure: primary measure). “[f]or example, a major decision that affects profit” (e.g., primary strategic objective measure) “is price” (e.g., a primary measure));

Therefore, it would have been obvious to one of ordinary skill in the art to modify Brown to include the teaching of Ouimet because the claimed invention is merely a combination of old

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elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable as evidenced by Draman, which teaches that “[w]idget recently adopted product profit” (e.g., primary strategic objective measure) “as the criterion” (e.g., primary measure) “for establishing its weekly production schedule” (e.g., scheduling jobs and/or work) (Draman, page 192, second column, last paragraph).

Brown provides “an algorithm that minimizes time duration project schedule” (e.g., strategic objective: minimize project time) “for a sequence of job tasks” (Brown, column 2, lines 6-11) as discussed above. Ouimet teaches an “optimization of a planning model while simultaneously satisfying at least one strategic objective” (Ouimet, ¶ 0010). Brown and Ouimet fail to explicitly teach the following limitations. However, Boonkhun in an analogous art of scheduling/planning for the purpose of defining and prioritizing strategic objectives (page 63) as shown does:

- *a. defining a plurality of strategic objectives* (page 63, 3.2.2. Methodology, which teaches “[d]efine the strategic objectives/goals of the company”);
- *b. prioritizing said strategic objectives* (page 63, 3.2.2. Methodology, which teaches “rate the importance of each strategic objective/goal relative to others”);

Therefore, it would have been obvious to one of ordinary skill in the art to modify Brown in view of Ouimet to include the teaching of Boonkhun because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim 5:

The limitations of claim 5 encompass substantially the same scope as claim 1. Accordingly, those similar limitations are rejected in substantially the same manner as claim 1, as described above.

The following are the limitations of claim 5 that differ from claim 1.

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- *a. a memory that stores computer-readable code, said memory containing:* (column 11, lines 9-10, which teaches “a Commercial Off The Shelf (COTS) Project software by itself” wherein a software is a computer-readable code);
- *ii. a listing of all of the independent and dependent work in said entity’s work queue* (col. 2, lines 4-5: “a plurality of projects each comprising multiple jobs or tasks” (e.g., independent and dependant work, see also figure 3) for scheduling);
- *iii. a second measure for scheduling said independent and dependant work* (col. 2, lines 7-8: “an algorithm that minimizes time duration project schedule for a sequence of job tasks);
- *iv. a prioritized listing of constraints for said independent and dependant work* (col. 3, lines 22-23: “[d]etermine the priority rule values” (e.g., prioritized listing of constraints) “for each activity and task);
- *b. a processor operatively coupled to said memory, said processor configure to implement said computer-readable code, said code configure to:* (Figure 2, which it illustrates a computer, wherein a computer contains a processor coupled to said memory);

Brown provides “an algorithm that minimizes time duration project schedule” (e.g., strategic objective: minimize project time) “for a sequence of job tasks”. Further, Brown provides “a project scheduling algorithm that looks ahead in time to anticipate and avoid infeasible schedules” (e.g., strategic objective: minimize cost by decreasing downtime and backorder). (Brown, column 2, lines 6-11). Brown fails to explicitly teach the following limitations. However, Ouimet, in an analogous art of scheduling/planning for the purpose of providing an entity’s strategic objective (§ 0010) as shown does:

- *i. a first measure of said entity’s strategic objective* (§ 0014: “[p]rice index is a commonly used measure, see also § 0019-0024);

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- *and iv. said entity's Management Information System (MIS) (¶ 0073: "storing results and enterprise data", enterprise data represents the information contained in a management information system);*

Therefore, it would have been obvious to one of ordinary skill in the art to modify Brown to include the teaching of Ouimet because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable as evidenced by Draman, which teaches that "[w]idget recently adopted product profit" (e.g., primary strategic objective measure) "as the criterion" (e.g., primary measure) "for establishing its weekly production schedule" (e.g., scheduling jobs and/or work) (Draman, page 192, second column, last paragraph).

Claim 9:

The limitations of claim 9 encompass substantially the same scope as claim 5. Accordingly, those similar limitations are rejected in substantially the same manner as claim 5, as described above.

- 41.** Claims 2, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al., (US 5,671,361) hereinafter "Brown" in view Ouimet (US 2002/0107819 A1) further in both view of Draman et al., Constraint-based accounting and its impact on organizational performance: A simulation of four common business strategies, hereinafter "Draman" and Boonkhun, Analysis of Operations Research Models Using Activity-Based Costing, The Pennsylvania State University, December 2002.as applied to claims 1, 5 and 9 above in view of Cicirello, Weighted Tardiness Scheduling with Sequence-Dependent Setups: A Benchmark Library, Intelligent Coordination and Logistics Laboratory, February 2003.

Claim 2:

Brown as shown discloses the following limitations:

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- *and b. adding said calculated work schedule measure from said scheduled independent and/or dependant job and/or work to each said independent and/or dependant jobs and/or work remaining in said work queue (column 3, lines 47-50, which teaches that "[t]he four priority rules are combined through an equal interval search technique by linear weighting" where the four priority rules who help to establish priorities (e.g., impact) among activities are added in order to provide a PRST priority value);*

The combination of Brown, Ouimet, Draman and Boonkhun fail to explicitly teach the following limitations. However, Cicirello in an analogous art of scheduling for the purpose of removing a scheduled job and/or order from the work queue (page 6) as shown does:

- *a. as an independent and/or dependent job and/or work is scheduled, removing said scheduled job and/or work from said work queue (page 6, Algorithm 1, which teaches "remove this selected task" (e.g., scheduled job and/or order) "from the set of unscheduled tasks" (e.g., work queue));*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove a scheduled job and/or order from the work queue to improve the combination of Brown, Ouimet, Draman and Boonkhun, thereby giving the predictable result of providing a best solution (Cicirello, pages 5-6, last paragraph).

Claim 6:

The limitations of claim 6 encompass substantially the same scope as claim 2. Accordingly, those similar limitations are rejected in substantially the same manner as claim 2, as described above.

Claim 10:

The limitations of claim 10 encompass substantially the same scope as claim 2. Accordingly, those similar limitations are rejected in substantially the same manner as claim 2, as described above.

- 42.** Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Nadja Chong** whose telephone number is **571.270.3939**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **BETH BOSWELL** can be reached at **571.272.6737**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents

P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to **571-273-8300**.

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Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window:**

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/Nadja Chong/ Examiner, Art Unit 3623

/Beth V. Boswell/

Supervisory Patent Examiner, Art Unit 3623